IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

WSOU Investments LLC	§	
doing business as	§	
Brazos Licensing and Development,	§	
	§	Civil Action No. 6:20-cv-00952-ADA
Plaintiff,	§	Civil Action No. 6:20-cv-00953-ADA
	§	Civil Action No. 6:20-cv-00956-ADA
v.	§	
	§	Jury Trial Demanded
OnePlus Technology (Shenzhen) Co., Ltd.,	§	
	§	
Defendant.	§	

DEFENDANT'S OPENING CLAIM CONSTRUCTION BRIEF (GROUP 1 PATENTS)[1]

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[1] Defendant OnePlus Technology (Shenzhen) Co., Ltd. files this Opening Claim Construction Brief subject to the outcome of its pending Petition for Writ of Mandamus seeking an order directing that the case be dismissed for insufficient service of process and lack of personal jurisdiction.

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I. INTRODUCTION

Plaintiff WSOU Investments LLC d/b/a Brazos Licensing and Development ("WSOU") asserts five patents across five separate cases against Defendant OnePlus Technology (Shenzhen) Co., Ltd.[2] To efficiently manage the claim construction process, the parties agree that these five patents should be divided into two groups—the Group 1 Patents and the Group 2 Patents. The Group 1 Patents consists of the '876, '776, and '614 Patents and the Group 2 Patents consists of the '708 and '746 Patents. This opening claim construction brief addresses the disputed claim terms for the Group 1 Patents.

The Group 1 Patents are generally directed to wireless communication systems. For the '876 Patent, WSOU asserts claims 1, 4, 9, and 10. For the '776 Patent, WSOU asserts claims 1-3, 5-7, 9-12, 14-16, and 18-20. For the '614 Patent, WSOU asserts claims 1, 2, 4, 5, 6, 13, 14, 16 and 17. For the Group 1 Patents, the parties dispute the meaning of seven terms or phrases, including the meaning of the phrase "varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station."

The remaining disputed phrases are indefinite. WSOU contests indefiniteness, but proposes only that they should be construed with their "plain and ordinary meaning." WSOU's failing to offer any definition only underscores the indefiniteness while failing to address the dispute over what the claim means. *See Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1318 (Fed. Cir. 2018) ("[a] determination that a claim term 'needs no

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[2] U.S. Patent No. 8,149,776 ("the '776 Patent") is asserted in Case No. 6:20-cv-00952-ADA. U.S. Patent No. 8,767,614 ("the '614 Patent") is asserted in Case No. 6:20-cv-00953-ADA. U.S. Patent No. 7,477,876 ("the '676 Patent") is asserted in Case No. 6:20-cv-00956-ADA. U.S. Patent No. 8,712,708 ("the '708 Patent") is asserted in Case No. 6:20-cv-00957-ADA. U.S. Patent No. 9,231,746 ("the '746 Patent") is asserted in Case No. 6:20-cv-958-ADA.

construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute) (quoting *O2 Micro Int'l, Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008)). Even where WSOU proposes an alternate construction, they still fail to resolve the indefiniteness issues. For these reasons, WSOU's proposals should be rejected.

II.   U.S. PATENT NO. 7,477,876 ("THE '876 PATENT")

A.   Background

The '876 Patent is directed to "providing channel quality information from a mobile station to a base station" in wireless communication system. Ex. A, 1:7-10 ("'876 Patent"). Typically, wireless communications systems require frequent feedback from mobile stations because the quality of the communication channel may vary over time as, for example, the mobile station move further away from the base station. To provide this feedback, a mobile station may send an ongoing series of reports to a base station. These reports may be sent using time-division multiplexed access to maximize both the individual user's throughput and the overall system throughput. The '876 Patent claims that such feedback mechanisms require transmitting large amounts of data. *Id.*, 2:44-52.

The '876 Patent purports to address these issues with an allegedly novel process where the rate at which a mobile station reports channel quality information to a base station is varied in response to detecting "the presence or absence of a [data] transmission from the base station to the mobile station." *Id.*, 2:62-65; *see also id.*, 3:52-4:10. The patent explains "there are numerous implementations for providing rate feedback at a faster rate after detection of a [data] transmission from the base station." *Id.*, 5:1-4. "For example, upon detection of a [data] transmission from the base station, the mobile station can report channel quality information at a second [faster] rate for a prescribed duration after the detection of the transmission." *Id.*, 5:4-7.

B.   Agreed Construction for the '876 Patent

For purposes of this case only, and to reduce the scope of the dispute, OnePlus has agreed that except for the term(s) identified below, and absent a construction later adopted by the Court, the claim terms of the '876 Patent shall be interpreted according to their plain and ordinary meaning as read by a person of ordinary skill in the art at the time of the invention, in the context of the entire patent, including the specification and drawings.

C.   Disputed Terms of the '876 Patent

1.   **"varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station" ('876 Patent, Claim 1)**

OnePlus's Proposed Construction	WSOU's Proposed Construction
varying a rate for reporting channel quality information from a mobile station to a base station using only the mobile station's detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate, and not varying the rate based on the content of the data transmission or any other message or signal instructing such action	Plain and ordinary meaning; or, if the Court deems a construction necessary: "varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station"

The purported point of novelty of claim 1 of the '876 patent is the requirement that the rate for reporting channel quality information varies based on detecting that data is (or is not) being transmitted from the base station. This claimed feature allegedly improved on systems that varied the rate of reporting based on an instruction that had been received or some other mechanism. Indeed, the claims issued only after the Applicants insisted the idea of varying the reporting rate based on only the presence or absence of an actual data transmission was different from varying the reporting rate based on a data transmission instructing that a change in rate be made. WSOU now seeks to recapture what was surrendered during prosecution by rejecting

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OnePlus's proposed construction in favor of whatever they can convince a jury would be the plain and ordinary meaning of this limitation. The Court should hold WSOU to the bargain the Applicants' struck to gain allowance of the claims and adopt OnePlus's proposed construction.

During prosecution, the Examiner rejected now-issued claim 1 as anticipated in view of prior art reference, U.S. Patent No. 6,067,458 ("Chen"). The Examiner stated that Chen taught:

> "[a] method comprising varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a transmission at the mobile station (see col. 6/lines 10-48 for varying rate information exchange between mobile station and base station, in idle time or absence of a reception of a transmission at the mobile station, rate is communicated at the eighth rate, and higher rate is used when voice or data communicating between these two components…)."

Ex. B, *Oct. 2, 2003 Non-Final Rejection* at ¶2.

In response to the Examiner's rejection, the Applicants clearly and unambiguously distinguished the claimed invention from Chen, which disclosed varying transmission rates based on receiving an instruction from the base station, on the grounds that the Applicants' claims were limited to adjusting the data rate using only the detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate. The Applicants' remarks included the following statements:

- That "[a]pplicants' claimed invention sets forth a mobile station that changes its rate of transmitting channel quality information based on the mobile's <u>detection of the absence or presence of a data transmission from the base station</u>." Ex. C *Feb. 2, 2004 Response to Non-Final Rejection* at 6 (emphasis in original);

- Further distinguishing Chen, explaining "[u]sing the actual data transmission from the base station as a trigger for the mobile station to change its rate of transmitting channel quality information back to the base station is quite different from using a separate signaling message from the base station." Ex. C *Feb. 2, 2004 Response to Non-Final Rejection* at 6-7.

- That "[Chen's] teachings are quite different from Applicants' claimed invention … [wherein] a mobile sends channel quality feedback to a base station at different rates depending on whether there is an absence or presence of a <u>data transmission from the base stations to the mobile</u>" Ex. D, *Aug. 6, 2004 Response to Final Rejection* at 5 (emphasis in original);

- And that "[i]n Chen, the rate of transmission … is varied as a function of the mobile receiving an <u>instruction</u> from the base station <u>before</u> (i.e., in preparation of) the base station sending the data transmission to the mobile. Accordingly, Chen does not teach varying feedback from the mobile based on the absence or presence of a <u>data transmission from the base station to the mobile</u>." Ex. D, *Aug. 6, 2004 Response to Final Rejection* at 5 (emphasis in original).

Applicants' statements constitute a clear and unmistakable disavowal of the technique disclosed in Chen—*i.e.*, varying the transmission rate based on the content of the data transmission or any other message or signal instructing such action—from the scope of the claims. The Applicants' statements confirmed that, unlike Chen, the claims are limited to the technique of varying the rate using the detection of the presence or absence of actual data transmission as the trigger for varying the rate. *See Seachange Intern., Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1372-73, 75 U.S.P.Q.2d 1385 (Fed. Cir. 2005) ("Where an applicant argues that a claim possesses a feature

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that the prior art does not possess in order to overcome a prior art rejection, the argument may serve to narrow the scope of otherwise broad claim language."); *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, 933 F.3d 1345, 1352-53 (Fed. Cir. 2019) (finding that even if an applicant's statement during prosecution does not rise to the level of disclaimer, "[a]ny explanation, elaboration, or qualification presented by the inventor during patent examination is relevant, for the role of claim construction is to capture the scope of the actual invention that is disclosed, described, and patented") (internal quotations and citations omitted). WSOU cannot sidestep Applicants' prior disavowal of claim scope now that it is alleging infringement of the very claims subject to this disavowal. *See Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) ("Claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers."). OnePlus's construction incorporates these disclaimers while WSOU's ignores them.

The specification confirms OnePlus's proposed construction by explaining that in the claimed invention the "channel quality feedback is provided from the mobile station to the base station at a variable rate such that the feedback rate is faster when the base station is transmitting to the mobile station and slower when there is no transmission occurring." Ex. A, 2:65-3:3. As described in the specification, the rate is a function of the presence or absence of a data transmission and not based on the content of a message or direction from the base station. *See* Ex. A, 3:4-7 ("Wireless resources can be more efficiently used since the rate at which the mobile station reports channel quality to the base station is *varied as a function of the absence or presence* of [data] transmission from the base station.") (emphasis added); *see also id.*, 5:1-4 ("[T]here are numerous implementations for providing rate feedback at a faster rate *after detection* of a [data] transmission from the base station.") (emphasis added).

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The specification distinguishes this from a typical channel quality feedback and rate adaption scheme in the prior art as shown in FIG. 1. The specification explains that Fig. 1 shows the calculation and reporting of the rate for the dedicated control channel performed according to well-known methods. In one known method, the mobile station monitors the channel quality and varies the rate based on the detection of a change in channel quality. Ex. A, 2:9-19. The specification of the '876 Patent purposefully distinguishes the claimed invention from this prior art.

Plaintiff's proposed alternative construction of "plain and ordinary meaning" does not explain how they interpret this phrase and, to the extent it differs from the construction proposed by OnePlus, it is incorrect. OnePlus's construction is not only confirmed by the arguments made by Applicants during prosecution, it is the "plain and ordinary" meaning of the claim language informed by the disclosures in the specification.

Therefore, the phrase "varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station" should be construed as "varying a rate for reporting channel quality information from a mobile station to a base station using only the mobile station's detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate, and not varying the rate based on the content of the data transmission or any other message or signal instructing such action."

III.   U.S. PATENT NO. 8,149,776 ("THE '776 PATENT")

A.   Background

The '776 Patent is directed to "wireless communication systems, method, devices, and computer programs, and, more specifically relate[s] to access procedures by which a user equipment accesses a wireless network." Ex. E, 1:7-11. Typically, user equipment ("UE"), such

as a cell phone, attempts to access a wireless network by selecting a signature sequence and sending it to a base station of a wireless communication system at a particular transmit power. *Id.*, 1:48-64. If the UE does not receive a response that the access attempt was successful, the UE will try again to access using a different signature sequence and/or an increased transmit power level. *Id.*, 2:12-23. The '776 Patent contends that this approach consumes "needless power" by the UE and requires "added computation complexity." Ex. E, 2:26-40.
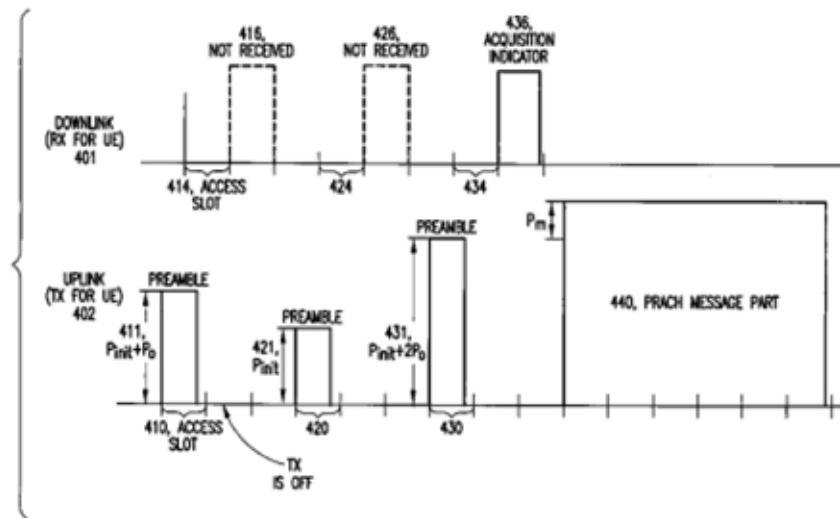
An embodiment of the '776 Patent—as shown in Figure 4 above—purports to address these issues with a transmitter that is somehow configured to enable the UE to make a subsequent access attempt to the wireless network by using the same, or selecting a different signature sequence, and by sending the selected signature sequence at a transmit power that is no greater than the transmit power used for the previous access attempt. *See id.* at 2:44-3:34.

B.   Agreed Construction for the '776 Patent

For purposes of this case only, and to reduce the scope of the dispute, OnePlus has agreed that except for the terms identified below, and absent a construction later adopted by the Court,

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the claim terms of the '776 Patent shall be interpreted according to their plain and ordinary meaning as read by a person of ordinary skill in the art at the time of the invention, in the context of the entire patent, including the specification and drawings.

C.   Disputed Terms of the '776 Patent

1.   "transmitter configured to attempt access to a wireless network…"/ "[transmitter] attempting access to a wireless network ('776 Patent, Claims 1 and 10)

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶ 6. **Function**: attempting access to a wireless network by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence and by randomly selecting the signature sequence from a set of signature sequences **Structure**: none disclosed The claim is indefinite.	Plain and ordinary meaning.

a.   The language in claims 1 and 10 is subject to construction under 35 U.S.C. § 112, ¶ 6

Claims 1 and 10 of the '776 Patent recite "transmitter configured to attempt access to a wireless network" and "[transmitter] attempting access to a wireless network," respectively. *See* Ex. E, claims 1 and 10. Claim 10 recites "a *transmitter configured to attempt access to a wireless network* by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences." Ex. E, claim 10 (emphasis added). In these claims, the function of "attempt[ing] access to a wireless network" involves both "sending on a random access channel at a first transmit power a first

preamble comprising a signature sequence" and also "randomly selecting the signature sequence from a set of signature sequences."

When a claim does not use the word "means," there is a rebuttal presumption that it not a means-plus-function limitation governed by 35 U.S.C. Section 112(6). *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1350 (Fed. Cir. 2015).   However, this presumption can be overcome if the claim term "fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function.'" *Id.* (citing *Watts v. XL Sys., Inc.*, 232 F.3d 877, 880 (Fed. Cir. 2000)).

Here, the phrases "transmitter configured to attempt access to a wireless network" and "[transmitter] attempting access to a wireless network" invokes § 112 ¶ 6 because a transmitter is not sufficient structure for performing the entirety of the claimed function. Even if "transmitter" has some structural meaning, § 112, ¶ 6 still applies if "the claim term . . . recites 'function **without reciting sufficient structure for performing that function**.'" *Williamson*, 792 F.3d at 1349 (emphasis added). "Transmitter" is not sufficient structure because the claimed function requires randomly selecting the signature sequence from a set of signature sequences. Randomly selecting a signature sequence is not one of the basic functions of a transmitter. Rather, performing this function requires additional structure (*e.g.*, a microprocessor or general-purpose computer executing a specialized algorithm) that is not recited in the claims.   Because insufficient structure is recited for performing the claimed function, these limitations are governed by § 112 ¶ 6.

> **b.**   **Claims 1 and 10 are invalid for indefiniteness because the specification fails to disclose adequate corresponding structure**

As discussed above, the claimed function of randomly selecting a signature sequence is not one of the basic functions of a transmitter and can only be performed using additional structure, such as a microprocessor or general-purpose computer executing a specialized algorithm. Even

assuming the specification discloses structure for transmitter and a general-purpose computer, the specification still needs to disclose an algorithm for randomly selecting the signature sequence. *See Cypress Lake Software, Inc. v. Samsung Elec. America, Inc.*, 382 F. Supp. 3d 586, 599 (E.D. Tex. May 10, 2019) (citing *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999)).

Here, the specification fails to disclose an algorithm for performing this required function. The specification makes passing reference to "computer software" executable by a data processor in the UE. *See* Ex. E, 10:46-49. But no code or algorithms of this software are disclosed anywhere in the specification.

Without an algorithm, there is insufficient structure disclosed in the patent for the claimed function, and claims 1 and 10 are indefinite.

2. "processor" ('776 Patent, Claims 10, 11, 12, 14, 15, 16, 18, 19)

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶ 6. **Function**: determining that access attempts are unsuccessful **Structure**: none disclosed The claim is indefinite.	Plain and ordinary meaning.

a. The language in claims 10, 11, 12, 14, 15, 16, 18, and 19 is subject to construction under 35 U.S.C. § 112, ¶ 6

Claims 10, 11, 12, 14, 15, 16, 18, and 19 of the '776 Patent each include the term "processor." *See* Ex. E, claim 1. Even though a claim does not use the term "means for," § 112 ¶ 6 will still apply if the claim term "fails to 'recite sufficiently definite structure' or else recites 'function without reciting sufficient structure for performing that function. *Williamson,* 792 F.3d at 1350. As this Court has recognized, the term "processor" is a nonce word that invokes § 112 ¶ 6.

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See Dyfan, LLC v. Target Corp., 6:19-cv-179-ADA, Dkt. 57 at 20 & n.4 (W.D. Tex. 2020).

Moreover, even if "processor" refers to a conventional CPU or microprocessor, there is still

insufficient structure recited in the claim because the claim does not recite an algorithm for either

a CPU or microprocessor to execute to perform the claimed functions. *Aristocrat Techs. Austl.*

Pty Ltd. v. Int'l Game Tech., 521 F.3d 1328, 1333 (Fed. Cir. 2008). For these reasons, the term

"processor" should be interpreted as a means-plus-function term.

                b.   **Claims 10, 11, 12, 14, 15, 16, 18, and 19 are invalid for indefiniteness for insufficient disclosure of corresponding structure**

The specification of the '776 Patent does not define the term "processor" or associate it

with any particular structure. The specification teaches that the "user equipment" includes a "data

processor 10A," *see, e.g.* '776 Patent at 10:31-32, but it does not identify a specific structure for

this "data processor." The specification also provides a list of processors that may operate with

the "main processor 10A."

Even if "processor" refers to a conventional CPU or microprocessor, further structure must

be disclosed. The Federal Circuit has consistently required that the disclosed structure be more

than a general-purpose computer or microprocessor, and that the specification must disclose an

algorithm for performing the claimed function.   *See, e.g.*, *Noah Systems Inc. v. Intuit Inc.*, 675

F.3d 1302, 1312 (Fed. Cir. 2012); *Aristocrat*, 521 F.3d at 1333. Because the '776 Patent's

specification does not disclose any such algorithm, the claims using the term "processor" are

indefinite.

                c.   **This Court has already found claims including "processor" subject to 35 U.S.C. § 112, ¶ 6 and indefinite for lack of adequately disclosed structure**

In *WSOU Investments, LLC v. Google LLC*, this Court considered several terms that

included the term processor. No. 6:20-cv-00571-ADA, Dkt. 49 (W.D. Tex. June 2, 2021)

(Albright, A.). In almost every single claim phrase including the word "processor" (*e.g.*, "client management processor configured to enable the user to select an electronic message from the inbox" "a detection processor configured to detect the action defined in the archiving rule assigned to the selected electronic message was carried out;" "a collaborative application management processor configured to manage collaborative applications;" and "said processor configured to provide a preemptive user output when the sub-set of pixels approaches an edge of the set of available pixels"), this Court found the phrase subject to 35 U.S.C. § 112, ¶ 6 and indefinite for failure to identify sufficient structure. The '776 Patent includes claims which use "processor" in a similarly indefinite manner. Therefore, this Court should find that the '776 Patent specification does not provide adequate structure for the recited "processor" and that claims 10, 11, 12, 14, 15, 16, 18, and 19 are invalid for indefiniteness.

3. "program of instructions" ('776 Patent, Claims 19)

OnePlus's Proposed Construction	WSOU's Proposed Construction
Preamble limiting; This claim should be construed under 35 U.S.C. 112, ¶ 6. **Function**: attempting access to a wireless network by sending a signature sequence on a random access channel **Structure**: none disclosed The claim is indefinite.	Plain and ordinary meaning. Alternative:

a. The language in claim 19 is subject to construction under 35 U.S.C. § 112, ¶ 6

Claim 19 of the '776 Patent recites "[a] non transitory computer readable memory storing a **program of instructions** that when executed by a processor result in actions comprising: ...." Ex. E, claim 19 (emphasis added). Similar to the claims reciting "transmitter" and "processor" discussed above, claim 19 does not use the term "means," but fails to recite "sufficiently definite

structure" by replacing the term "means" with "program of instruction." *See Williamson*, 792 F.2d at 1350; *Dyfan*, 6:19-cv-179-ADA, Dkt. 57 at 20 & n.4 (finding "code" to be a nonce word that invokes § 112, ¶ 6). Therefore, claim 19 is subject to construction under § 112, ¶ 6.

b.   Claim 19 is invalid for indefiniteness for insufficient disclosure of corresponding structure

The term "program of instructions" does not convey definite structure to perform the recited function of "attempting access to a wireless network by sending a signature sequence on a random access channel." '776 Patent, claim 19. Rather, a POSITA would understand that "program of instructions" simply refers to unspecified software instructions. However, "disclosing software [] without providing some detail about the means to accomplish the function is not enough." *Function Media, LLC v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013).

The specification fails to provide any structural meaning for "program of instructions" or to distinguish that term from generic software. Further, the specification fails to provide an algorithm for performing the claimed function. As discussed above, when a claim recites a computer or software as the structure, the specification must disclose the algorithm used to perform the claimed function.

Because no algorithm is disclosed, this Court should find that the '776 Patent's specification fails to provide adequate structure for "program of instructions" and, thus, claim 19 is invalid for indefiniteness.

IV.   U.S. PATENT NO. 8,767,614 ("THE '614 PATENT")

A.   Background

The '614 Patent is directed to reporting buffer information in a communication system. Figure 2 (reproduced below) provides an illustration of a wireless communication system where such reporting is implemented.

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Ex. F ('614 Patent), Fig. 2
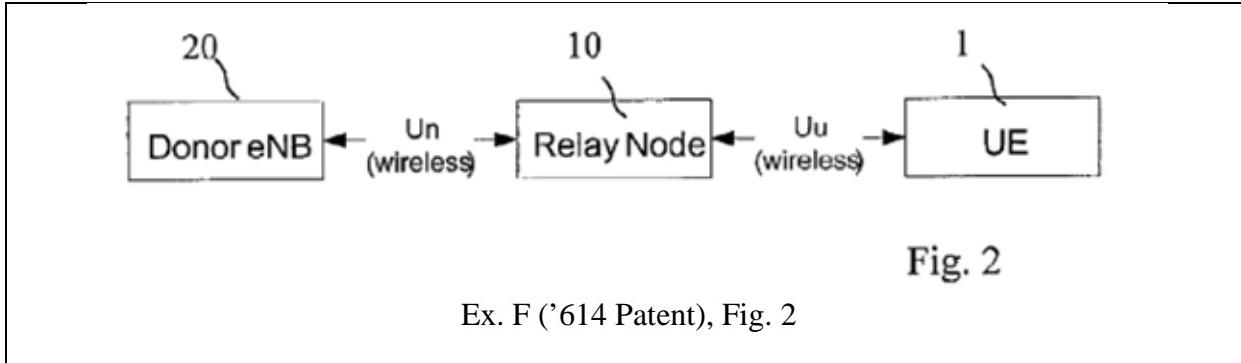
As shown in Figure 2, Relay Node 10 relays information between user equipment UE 1, such a cell phone, and donor station Donor eNB 20, such as a base station in a cellular system, "to enlarge the coverage of a [donor] station." Ex. F, 1:60-61. The Donor eNB 20 is responsible for "schedule[ing] proper uplink backhaul resources for the relay node as well as the uplink flow control." *Id.*, 2:57-59. "However, a relay node can also simultaneously serve multiple user equipments, and thus a considerable volume of data may aggregate at the relay node." *Id.*, 2:59-62. Therefore, "the buffer of a relay node may be considerably larger and thus far from overflow compared to the buffer of the user equipment." *Id.*, 2:65-3:2. The '614 Patent is thus directed to means for causing sending of a buffer information report from the "node for relaying" (*e.g.*, Relay Node 10) to a system station (*e.g.*, Donor eNB 20) that "is generated based on a report format used for uplink reporting by a user station" (*e.g.*, EU 1). *Id.*; *id.*, claim 6.

"Fig. 3 shows an example of a controller apparatus 30 for a relay node." *Id.*, 6:4-5. The controller apparatus 30 comprises "at least one memory 31, at least one data processing unit 32," "an input/output interface 34" and "a buffering entity 33." *Id.*, 6:5-7; Fig. 3 (reproduced below). According to the patent, "[t]he controller may be configured to execute an appropriate software code to provide the desired control functionality." *Id.*, 6:7-9.

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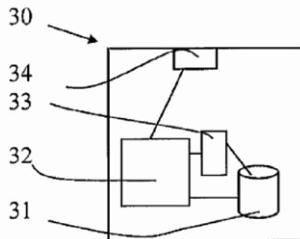
Fig. 3

Ex. F ('614 Patent), Fig. 3

B.   Agreed Construction for the '614 Patent

For purposes of this case only, and to reduce the scope of the dispute, OnePlus has agreed

that except for the terms identified below, and absent a construction later adopted by the Court,

the claim terms of the '614 Patent shall be interpreted according to their plain and ordinary

meaning as read by a person of ordinary skill in the art at the time of the invention, in the context

of the entire patent, including the specification and drawings.

C.   Disputed Terms of the '614 Patent

1.   "means for causing sending of a buffer information report to a system station" ('614 Patent, Claim 6) / "at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus … sending of a buffer information report to a system station" ('614 Patent, Claim 13)

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6. **Function**: causing sending of a buffer information report to a system station. **Structure**: none disclosed. The claim is indefinite.	This term is not indefinite No construction necessary – plain and ordinary meaning Further, to the extent the Court treats the term as means-plus-function: **Function**: "for causing sending of a buffer information report" **Structure**: processor and memory Refer 6:4-9

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a.   **The language in claim 6 is subject to construction under 35 U.S.C. § 112, ¶6**

Claim 6 of the '614 patent recites "means for causing sending of a buffer information report to a system station."   Because this limitation uses the phase "means for" and then recites the function of "causing sending of a buffer information report to a system station," it is presumed to be governed by § 112, ¶6. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1366 (Fed. Cir. 2008) ("A claim element that contains the word 'means' and recites a function is presumed to be drafted in means-plus-function format under 35 U.S.C. § 112 ¶ 6."). This presumption cannot be rebutted here because claim 6 does not recite sufficient structure to perform the claimed function. *See id.* ("The presumption is rebutted, however, 'if the claim itself recites sufficient structure to perform the claimed function.'"). In fact, the claim does not recite any structure at all. Therefore, this claim element should be interpreted to be a means-plus-function limitation, subject to 35 U.S.C. § 112 ¶ 6, and with a claimed function of "causing sending of a buffer information report to a system station."[3]

b.   **Claim 6 is invalid for indefiniteness for insufficient disclosure of corresponding structure**

The only structures that WSOU identifies as corresponding to the "means for causing sending of a buffer information report to a system station" are "processor and memory." WSOU identifies no algorithm that performs the claimed function. This confirms that claim 6 is indefinite for lack of sufficient structure disclosed in the patent.

A "processor and memory" "amount to nothing more than a general-purpose computer." *HTC Corp. v. IPCom GmbH & Co.*, KG, 667 F.3d 1270, 1280 (Fed. Cir. 2012) ("The processor

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[3] WSOU improperly truncates the recited function in both claim 6 and claim 13 which requires not only sending a buffer report, but also sending this buffer report "to a system station." Ex. F, claims 6, 13.

and transceiver amount to nothing more than a general-purpose computer."). Courts have "consistently required that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor." *Id.* (citing *Aristocrat*, 521 F.3d at 1333). Rather, the specification must disclose "an algorithm that the processor and [memory] execute." *Id.*; *see also Eon Corp. IP Holdings LLC v. AT&T Mobility LLC*, 785 F.3d 616, 623 (Fed. Cir. 2015) ("A microprocessor or general purpose computer lends sufficient structure only to basic functions of a microprocessor. All other computer-implemented functions require disclosure of an algorithm.").

The '614 Patent's specification confirms that an algorithm is required to perform the claimed functions. Indeed, the portion of the specification relied on by WSOU to identify the corresponding structures states that the disclosed structures "execute an appropriate software code to provide the desired control functionality." Ex. F, 6:4-9. But the specification fails to describe what this "appropriate software code" is. *See, e.g.*, Ex. F, 10:20-22 (explaining "[a]n appropriately adapted computer program code product or products may be used for implementing the embodiments," but failing to disclose any such computer program code or products). Entirely absent from the disclosure, and necessary under the law, is a description of any algorithms, routines, or instructions to perform the claimed function.

Absent disclosure of an algorithm for "causing sending of a buffer information report to a system station," claim 6 is invalid for indefiniteness. *See Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008) ("[I]f a claim includes a means-plus-function limitation, failure to disclose adequate structure corresponding to the claimed function results in the claim being invalid for indefiniteness."); *see also WSOU Investments LLC d/b/a Brazos Licensing and Development v. Google LLC f/k/a Google Inc.*, 6:20-cv-00581-ADA, Dkt.

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46 at 3 (W.D. Tex. June 2, 2021) (holding "issuing means for issuing an alert" indefinite for

failure to disclose algorithm); *WSOU Investments LLC v. Microsoft Corporation*, 6:20-cv-00456-

ADA, Dkt. 62 at 5 (W.D. Tex. Mar. 23, 2021) (holding "means for defining access rules"

indefinite for failure to disclose algorithm).

      c.   **Claim 13's "sending of buffer information report" limitation is governed by 35 U.S.C. § 112, ¶6, rendering claim 13 invalid for insufficient disclosure of corresponding structure**

Claim 13 of the '614 Patent recites a similar limitation: "the at least one memory and the

computer program code configured to, with the at least one processor, cause the apparatus…

sending of a buffer information report to a system station." Ex. F, claim 13. Although claim 13

does not use the term "means for," it recites "memory," "computer program code," and

"processor," which are all nonce words with the same effect as "means."

"When a claim term lacks the word 'means,' the presumption can be overcome and

§ 112, para. 6 will apply if the challenger demonstrates that the claim term fails to 'recite

sufficiently definite structure' or else recites 'function without reciting sufficient structure for

performing that function.'" *Williamson*, 792 F.3d at 1349 (Fed. Cir. 2015).

Claim 13's formulaic reference to "computer program code," "processor," and "memory"

does not connote sufficient structure to avoid means-plus-function treatment. Indeed, as this

Court has explained, applicants cannot "simply recite two nonce words—'processor' and

'code'—together in order to essentially write the claim in a means-plus-function format without

being subject to § 112, ¶6." *Dyfan,* 6:19-cv-179-ADA, Dkt. 57 at 20 & n.4; *see also Cypress*

Lake Software, Inc. v. ZTE (USA) Inc., 2018 WL 4035968, at *9 (E.D. Tex. Aug. 23, 2018)

(holding "the term 'code for' does not connote sufficiently definite structure," and "is defined

only by the function that it performs."); *Global Equity (SA) Pty. Mgmt. Ltd. v. Expedia, Inc.*, No.

2:16-cv-95, 2016 WL 7416132, at *29-30 (E.D. Tex. Dec. 22, 2016) (holding "program code

for" invokes § 112, ¶ 6 because it fails to convey structure when the term is "defined only by the function that it performs. . . . There are no indicia of the structural nature of this code in the claim or in the disclosure of the [] patent."); *GoDaddy.com, LLC v. RPost Commc'ns Ltd.*, 2016 WL 212676, at *56-57 (D. Ariz. Jan. 19, 2016) (finding that "processor for associating the content data with dispatch record data" triggers § 112, ¶6 because it did "not convey to a skilled artisan anything about the internal components, structure, or specific operation of the processor."). The addition of "memory" does not add any meaningful structure because it simply indicates where the "code" is stored without supplying any structural specificity.

The specification confirms that the processor, memory, and program code of claim 13 are nothing more than black-box placeholders requiring specific algorithms to perform the recited functions. While the specification says that "[a]n appropriately adapted computer program code product or products may be used for implementing the embodiments" (Ex. F, 10:20-22), no such code is disclosed or described. Accordingly, this limitation of claim 13 is governed by § 112, ¶6.

Since the disputed claim limitation in claim 13 is substantially the same as that in claim 6, for at least the same reasons described for claim 6 above, the '614 Patent specification does not provide any adequate disclosure of an algorithm for "sending of a buffer information report to a system station." Therefore, claim 13 is also invalid for indefiniteness.

> **2.   "means for causing sending of an indication to the system station" ('614 Patent, Claim 6) / "at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus . . . sending of an indication to the system station" ('614 Patent, Claim 13)**

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6.	This term is not indefinite No construction necessary – plain and ordinary meaning
Function: causing sending of an	

indication to the system station. **Structure**: none disclosed. The claim is indefinite.	Further, to the extent the Court treats the term as means-plus-function: **Function**: "for causing sending of an indication to the system station" **Structure**: processor and memory Refer 6:4-9

> **a.** **The language in claim 6 is subject to construction under 35 U.S.C. § 112, ¶ 6**

Claim 6 of the '614 patent recites "means for causing sending of an indication to the system station." Because this limitation uses the phrase "means for" and then recites the function of "causing sending of an indication to a system station," it is presumed to be governed by § 112, ¶ 6. *Net MoneyIN, Inc.*, 545 F.3d at 1366. This presumption cannot be rebutted here because the claim does not recite any structure that can perform the claimed function. Therefore, this claim element should be interpreted under § 112, ¶ 6 with a claimed function of "causing sending of an indication to the system station."

> **b.** **Claim 6 is invalid for indefiniteness for insufficient disclosure of corresponding structure**

Similar to the limitation discussed in Section IV.C.1.b, the only structures that WSOU identifies as corresponding to the "means for causing sending of an indication to a system station" are "processor and memory." This is not sufficient structure. The specification must also disclose "an algorithm that the processor and [memory] execute." *HTC Corp.*, 667 F.3d at 1280. For all the reasons discussed in Section IV.C.1.b, the specification fails to provide an adequate disclosure of an algorithm for "causing sending of an indication to a system station." Therefore, claim 6 is invalid for indefiniteness.

   c. **Claim 13's "sending of an indication" limitation is governed by 35 U.S.C. § 112, ¶6, rendering claim 13 invalid for insufficient disclosure of corresponding structure**

Claim 13 of the '614 Patent recites a similar limitation: "the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus… sending of an indication to the system station." Ex. F, claim 13. Although claim 13 does not use the term "means for," it recites "memory," "computer program code," and "processor," which are all nonce words with the same effect as "means," requiring that this term be construed under § 112, ¶6. As established in Section IV.C.1.c, claim 13's formulaic recitation of "computer program code," "processor," and "memory" does not connote sufficient structure to avoid means-plus-function treatment. And the specification confirms that a processor, memory, and program code of claim 13 are nothing more than placeholders requiring specific algorithms to perform the recited functions. Therefore, this limitation of claim 13 is subject to § 112, ¶ 6.

Since the disputed claim limitation in claim 13 is substantially the same as that in claim 6, for at least the same reasons described for claim 6 above, the '614 Patent's specification does not provide adequate disclosure of an algorithm for "causing sending of an indication to the system station." Therefore, claim 13 is invalid for indefiniteness.

   3. **"the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: process an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension" ('614 Patent, Claim 14)**

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6.	Plain and ordinary meaning; or, if the Court deems a construction is necessary:
Function: indefinite. **Structure**: indefinite. Alternatively:	"process a signal signifying that the buffer size of the intermediate node is extended from that of the user equipment and information of the size of the extension"

Function: processing an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension. **Structure**: none disclosed. In either instance, the claim is indefinite. This proposed construction supersedes Defendant's Proposed Claim Constructions served on August 10, 2021.	

   a.   **The "process an indication" limitation of claim 14 is subject to construction under 35 U.S.C. § 112, ¶6**

Similar to claim 13 of the '614 Patent, claim 14 recites: "the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: **process an indication** that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension." Ex. F, claim 14 (emphasis added). Although claim 14 does not use the term "means for," it fails to recite "sufficiently definite structure" by using the same nonce language as in claim 13—"memory," "computer program code," and "processor." *See supra* Section IV.C.2.c. Therefore, claim 14 is subject to construction under § 112, ¶ 6.

   b.   **Claim 14 is invalid because the claimed function of "processing an indication" is indefinite**

"[T]he meaning of the words used to describe the claimed function" should be construed "using ordinary principles of claim construction." *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1319 (Fed. Cir. 2003). Here, in construing the recited function, the Court should determine what "process an indication" means under "ordinary principles of claim construction."

The phrase "process an indication" is indefinite because the word "process" lacks "reasonable certainty" in the context of the claim. Claim 14 recites "process an indication that

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the buffer size of the node for relaying is extended from that of the user equipment and

information of the size of the extension." But nothing in the claim explains how to "process" the

indication or what this processing entails. The language "that the buffer size of the node for

relaying is extended from that of the user equipment and information of the size of the

extension" merely qualifies "indication," describing what the "indication" is supposed to convey.

Nothing in the claim describes the act of "processing" such an indication.

The specification provides no more insight into what it means to "process an indication."

The specification includes a passing reference to "processing an indication that the node for

relaying has different buffering capabilities than the user station." Ex. F, 3:56-57. But there is

no description or any other guidance as to what this processing entails. Moreover, this

processing does not concern the particular "indication" prescribed by claim 14, *i.e.*, that the

buffer size of the node for relaying is extended from that of the user equipment and information

of the size of the extension. The specification is wholly devoid of any guidance as to what is

required to "process an indication" as recited in claim 14.

WSOU's proposed construction does not save the term from indefiniteness because it

simply replaces the term "indication" with "signal," leaving the word "process" unchanged. It is

no more clear how to process WSOU's "signal" than the claimed "indication." That WSOU

cannot even propose a construction that sheds any light on what it means to "process" an

indication as required by claim 14 confirms this limitation is indefinite.

> **c.   Even if the function recited in claim 14 were not indefinite, claim 14 would still be invalid as indefinite for lack of sufficient corresponding structure**

Even if the phrase "process an indication" were not indefinite (it is), claim 14 would still

be invalid for indefiniteness for failure to disclose adequate structure. This is because the

specification does not specify any algorithm for "processing an indication" as required by claim

14. As discussed above, although the specification mentions "memory" and "data processing unit," it does not provide any details, much less an algorithm, for *how* "an indication" can be "process[ed]." *See supra* Section IV.C.3.b. The specification acknowledges that the process would be performed by "appropriately adapted computer program code product or products," but fails to disclose what this appropriately adapted code might do or how it operates. *See id.*

Without disclosure of an algorithm for "processing an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension," claim 14 is invalid for indefiniteness. *Technology Licensing Corp.*, 545 F.3d at 1338.

V.   CONCLUSION

OnePlus requests that the Court adopt its proposed constructions for the term "varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station" and find the remaining terms indefinite.

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CERTIFICATE OF SERVICE

The undersigned counsel hereby certifies that on August 24, 2021, a true and correct copy

of the foregoing document was served via electronic mail on counsel of record per

Local Rule CV-5.

/s/ *Michael J. Lyons*
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